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11 UNITED STATES DISTRICT COURT
12 FOR THE NORTHERN DISTRICT OF CALIFORNIA
13 SAN FRANCISCO DIVISION

14 3COM CORPORATION,
15 Plaintiff-Counterdefendant,
16 v.
17 REALTEK SEMICONDUCTOR
18 CORPORATION,
19 Defendant - Counterclaim Plaintiff.

Case No. C 03-02177-VZW

**3COM CORPORATION'S
OPPOSITION TO REALTEK
SEMICONDUCTOR
CORPORATION'S MOTIONS FOR
SUMMARY JUDGMENT OF NON-
INFRINGEMENT OF U.S. PATENT
NOS. 5,307,459; 6,526,446; AND
6,570,884**

Date: December 20, 2007
Time: 2:30 p.m.
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PROTECTIVE ORDER.**

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PRELIMINARY STATEMENT

Realtek has moved for summary judgment of non-infringement with respect to three of the ten claims that 3Com currently asserts in this case.¹ With respect to two of these claims—claim 1 of the ‘459 Patent and claim 26 of the ‘446 Patent—3Com agrees with Realtek that there is no genuine issue of material fact concerning Realtek’s infringement and previously moved for summary judgment concerning them, demonstrating in detail precisely how Realtek’s products meet each and every limitation of these claims.² The only dispute now is whether the claim language, properly interpreted and applied, covers those products.

As we demonstrate in greater detail below, Realtek’s arguments distort the claims by improperly reading limitations into them from descriptions of particular embodiments in the patents’ specifications, and by attempting to give their terms idiosyncratic meanings that contradict both the language of the claims themselves as well as this Court’s prior Claim Construction Order. For example, Realtek seeks to impose a limitation on claim 1 of the ‘459 Patent that does not exist, citing to a description of an alternative embodiment to make the erroneous assertion that the claim requires the sending of two interrupt signals from an adapter directly to a host processor (Def. ‘459 Non-Infringement Br. at 3), when the Court has previously recognized that the claim language only requires one. Dkt. No. 375 (Claim Construction Order) at 16–18. Similarly, Realtek seeks to impose a false limitation on claim 26 of the ‘446 Patent to require the generation of a *set* of frame segment descriptors, reading again from a description of a

¹ Realtek’s motion does not address asserted claims 1, 10, and 21 of U.S. Patent No. 5,434,872 (the “‘872 Patent”) or 9, 21, 28, and 47 of U.S. Patent No. 5,732,094 (the “‘094 Patent”). In light of Realtek’s prior admissions, we are not surprised it chose not to move for summary judgment of non-infringement with respect to any of the claims of the ‘094 or ‘872 Patents. As we demonstrated in our Motion for Summary Judgment of Infringement, filed November 16, 2007, 3Com is entitled to summary judgment of infringement on claim 21 of the ‘872 Patent and claim 28 of the ‘094 Patent—as well as claim 1 of U.S. Patent No. 5,307,459 (the “‘459 Patent”) and claim 26 of U.S. Patent No. 6,526,446 (the “‘446 Patent”)—based upon Realtek’s admissions and the undisputed facts. *See* 3Com Corporation’s Motion for Summary Judgment of Infringement of U.S. Patent Nos. 5,307,459; 5,434,872; 5,732,094; and 6,526,446, filed Nov. 16, 2007.

² *See* 3Com Corporation’s Motion for Summary Judgment of Infringement of U.S. Patent Nos. 5,307,459; 5,434,872; 5,732,094; and 6,526,446, filed Nov. 16, 2007; Declaration of Dr. Michael Mitzenmacher, dated Nov. 16, 2007 (“Mitzenmacher Nov. 16 Decl.”) Exs. 2–5.

1 particular embodiment (Def. '446 Non-Infringement Br. at 9), when the claim language itself
 2 speaks only of a single "frame segment descriptor." Declaration of Victor Cole, dated Nov. 16,
 3 2007 ("Cole Decl.") Ex. 8 ('446 Patent) at claim 26; *see also* Dkt. No. 375 (Claim Construction
 4 Order) at 20–21. Because Realtek's arguments can therefore be resolved by the Court as a matter
 5 of law with what is, in effect, an analysis in the nature of claim construction, these claims are ripe
 6 for summary adjudication.

7 The third claim at issue here—claim 1 of the '884 Patent—differs in that 3Com did
 8 not previously move for summary judgment with respect to it. Nevertheless, Realtek's motion
 9 makes clear that the issues concerning this claim are similar and that it, too, can be summarily
 10 resolved. Again, Realtek's argument for non-infringement depends entirely upon its attempt to
 11 persuade the Court to construe a particular claim term—"while the packet is in the buffer"—in a
 12 peculiar way. Without any support in the claim language itself or in the Court's prior
 13 constructions, Realtek argues that this limitation can be met only if the *entirety* of the packet is in
 14 the buffer when it is being processed. We demonstrate below that this proposed interpretation of
 15 the claim is, once again, improperly based on a description of an embodiment in the specification.
 16 Moreover, we respectfully submit that no reasonable jury could find that Realtek's Descriptor-
 17 Based Products³ do not, in fact, read and process data from an identified packet while at least a
 18 portion of that packet is in the buffer, as described in claim 1 of the '884 Patent. Accordingly, the
 19 Court has discretion to grant summary judgment in 3Com's favor with respect to this claim. At
 20 minimum, a material issue of fact exists as to whether Realtek's products infringe this claim and
 21 Realtek's motion for summary judgment should be denied.

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 27 ³ See Mitzenmacher Nov. 16 Decl. Ex. 9 (listing Descriptor-Based Products). Dr. Rubin
 28 refers to these products in his Expert Report as the "Group II–V products." Declaration of
 Victor Cole, dated Nov. 16, 2007 ("Cole Decl.") Ex. 9 ("Rubin Report") ¶ 54.

STATEMENT OF FACTS

I. Features of Realtek Products that Infringe the ‘459 Patent

As set forth in greater detail in 3Com’s opening brief in support of its motion for summary judgment,⁴ all of Realtek’s accused products (except for the RTL8110SC and PCI-Express Products) infringe claim 1 of the ‘459 Patent.⁵ 3Com has demonstrated, and Realtek admits, that Realtek’s products include the required buffer memory, network interface logic, and host interface logic. *See* Mitzenmacher Nov. 16 Decl. ¶¶ 39–42; Cole Decl. Ex. 10 (Realtek’s RFA Responses) at Nos. 6, 22, 113. 3Com has also shown that Realtek’s products include threshold logic including:

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Realtek does not deny that its products contain these elements. To the contrary, as Realtek itself explains, “[w]hen data received from the network is transferred to the host [in an early receive operation], the number of PCI bus cycles is counted and, when that count reaches the threshold value, the counter generates an “EROK,” or “Early Receive OK” signal.” Def. ‘459 Non-Infringement Br. at 5. The EROK signal “sets a status bit within the Realtek controller chip,” in response to which “the Realtek products generate the ROK, or “Receive OK,” interrupt to the

⁴ 3Com Corporation’s Motion for Summary Judgment of Infringement of U.S. Patent Nos. 5,307,459; 5,434,872; 5,732,094; and 6,526,446, filed Nov. 16, 2007.

⁵ The RTL8110SC and PCI Express Products are excluded based on the absence of

1 host.” *Id.* (citing Declaration of Jen-Che Tsai in Support of Realtek’s Motion for Summary
 2 Judgment of Noninfringement of U.S. Patent No. 5,307,459, dated Nov. 16, 2007 (“Tsai ‘459
 3 Decl.”) ¶¶ 9–10; Declaration of Izhak Rubin, Ph.D. in Support of Realtek’s Motion for Summary
 4 Judgment of Noninfringement of the ‘459 Patent, dated Nov. 16, 2007 (“Rubin ‘459 Decl.”) ¶ 14).
 5 Thus, the EROK indication signal is generated in response to the threshold comparison, and the
 6 ROK interrupt signal is sent to the host in response to the EROK indication signal.

7 Realtek nevertheless argues that its products do not infringe the ‘459 Patent
 8 because they generate only one interrupt signal directly to the host processor.⁶ The factual
 9 assertion is true, but it is irrelevant to the question of infringement. As discussed more fully
 10 below, Realtek incorrectly assumes that claim 1 of the ‘459 Patent requires that two interrupts be
 11 sent directly to the host processor, an assumption that is unsupported by the claim language and
 12 inconsistent with the Court’s Claim Construction Order.

13 **II. Features of Realtek Products that Infringe the ‘446 Patent**

14 As set forth in greater detail in 3Com’s opening brief in support of its motion for
 15 summary judgment,⁷ all of Realtek’s Descriptor-Based Products infringe claim 26 of the ‘446
 16 Patent. 3Com has shown that the Descriptor-Based Products:

- 17 • receive from a host device a descriptor signal which corresponds to data stored
 18 within memory (Mitzenmacher Nov. 16 Decl. ¶¶ 68–70 & Ex. 5; Cole Decl. Ex. 10
 (Realtek RFA Responses) at No. 146);

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(Mitzenmacher Nov. 16 Decl.

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 22 ⁶ Realtek also notes in its statement of facts that “circuitry exists in the 8169 products

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 25 Thus, Realtek admits that its RTL8169 products contain the same
 26 infringing capability, which standing alone is sufficient for a finding of infringement of
 this apparatus claim. *See Intel Corp. v. United States Int’l Trade Comm’n*, 946 F.2d 821,
 832 (Fed. Cir. 1991).

27 ⁷ 3Com Corporation’s Motion for Summary Judgment of Infringement of U.S. Patent Nos.
 28 5,307,459; 5,434,872; 5,732,094; and 6,526,446, filed Nov. 16, 2007.

¶ 69; Declaration of Dr. Michael Mitzenmacher, dated Nov. 30, 2007 (“Mitzenmacher Opp. Decl.”) ¶¶ 33–37); and

- receive the corresponding frame segment from host memory using a DMA download circuit (Mitzenmacher Nov. 16 Decl. Ex. 5).

Realtek concedes that its Descriptor-Based Products “are descriptor-based and can perform TCP segmentation of large files.” Def. ‘446 Non-Infringement Br. at 4. As Realtek explains,

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III. Features of Realtek Products that Infringe the '884 Patent

3Com has demonstrated, and Realtek admits, that Realtek's Descriptor-Based Products include:

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6 As we demonstrate below, neither claim 1 of the '884 Patent nor
7 the Court's construction of the terms therein support any such limitation.

8 **ARGUMENT**

9 **I. Legal Standard**

10 Claim construction is a matter of law for the Court, while the determination of
11 whether the asserted claims read on the accused products is a question of fact. *See Markman v.*
12 *Westview Instr., Inc.*, 52 F.3d 967, 970–71 (Fed. Cir. 1995) (*en banc*); *Insituform Techs., Inc. v.*
13 *Cat Contracting, Inc.*, 161 F.3d 688, 692 (Fed. Cir. 1998). Although many of the claim
14 construction issues in this case have been resolved by the Court, the Court is not precluded from
15 resolving remaining claim construction issues as a matter of law during the summary judgment
16 stage. *See Markman*, 52 F.3d at 981. (“[Pronouncing the meaning of the claim language] can be
17 accomplished by the court in framing its charge to the jury, but may also be done in the context of
18 dispositive motions such as those seeking judgment as a matter of law.”); *see also Am.*
19 *Permahedge, Inc. v. Barcana, Inc.*, 105 F.3d 1441, 1444–45 (Fed. Cir. 1997) (using a motion for
20 summary judgment as an appropriate forum for resolving the disputed construction of a claim
21 term); *Berger v. Rossignol Ski Co., Inc.*, No. Cv-05-02523-CRB, 2006 WL 708943, at *2, 2006
22 U.S. Dist. LEXIS 15764, at *5 (N.D. Cal. Mar. 21, 2006) (citing *Markman*, 52 F.3d at 981)
23 (“[T]he court has discretion to construe claims, if needed, in the context of a summary judgment
24 motion.”).

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1 **II. The Court Should Deny Realtek's Motion for Summary Judgment of Non-**
 2 **Infringement of Claim 1 of the '459 Patent**

3 **A. Realtek Ignores the Court's Construction of "Indication Signal" and**
 4 **Misinterprets the Term "Generating an Indication Signal to the Host"**

5 Realtek's non-infringement argument rests upon a misinterpretation of the language
 6 of claim 1 of the '459 Patent and is inconsistent with the Court's prior construction of its terms.
 7 The term in dispute is "generating an indication signal to the host processor." *See* Def. '459 Non-
 8 Infringement Br. at 7–10. Realtek contends that this language should be construed to require that
 9 "the indication signal is generated directly to the host" and that this signal "must also be followed
 10 by a second, subsequent interrupt." Def. '459 Non-Infringement Br. at 3. Because its products
 11 use an indication signal that is not an interrupt and is not sent directly to the host, Realtek argues
 12 that its products cannot meet the limitations of the claim.

13 The fatal flaw in Realtek's argument is that, as the Court clearly understood in its
 14 Claim Construction Order, "the indication signal and interrupt signal [described in claim 1] are
 15 different things." Dkt. No. 375 (Claim Construction Order) at 17.¹² While the indication signal
 16 "heralds the arrival of a subsequent" interrupt, it need not itself be an interrupt. Dkt. No. 375
 17 (Claim Construction Order) at 17. Citing numerous examples in the specification of the '459
 18 Patent where an interrupt is generated in response to an indication signal, thereby reducing
 19 interrupt latency, the Court held that an indication signal, for purposes of interpreting claim 1,
 20 simply means "a signal that indicates a subsequent interrupt." *Id.* at 18.

21 Nor does claim 1 require that the indication signal be sent *directly* to the host, as
 22 Realtek suggests. Def. '459 Non-Infringement Br. at 7–8. The claim language uses the word
 23 "generating," which connotes the initiation of an action, rather than its completion.¹³ The

24 ¹² Brian Petersen, the first-named inventor of the '459 Patent, explains in his declaration: "an
 25 interrupt is a hardware signal that is driven directly to the host or microprocessor, generally
 26 through an interrupt controller, which causes a change of state in the host or
 27 microprocessor. An indication signal indicates only that a change of state has occurred on
 28 the adapter. It may or may not result in an interrupt signal to the host." Declaration of
 Brian Peterson, dated Nov. 30, 2007 ("Petersen Decl.") ¶ 6.

¹³ "Generated," according to Merriam-Webster's Ninth New Collegiate Dictionary, means
 "to bring into existence," "to originate by a vital or chemical process," "to define or
 originate (as a mathematical or linguistic set or structure) by the application of one or more

1 limitations of the claim are met if the device contains “threshold logic for allowing the period of
 2 time for the host processor to respond to the indication signal during the transferring of the data
 3 frame” (Cole Decl. Ex. 7 (‘459 Patent), claim 1), without any requirement that the host processor
 4 must respond *directly* to that indication signal. Indeed, Realtek can point to nothing in the patent
 5 specification to support its misreading of the claim beyond the “Summary of the Invention” (Def.
 6 ‘459 Non-Infringement Br. at 3), which does little more than restate the claim language virtually
 7 *in haec verba*. See Cole Decl. Ex. 7 (‘459 Patent) 2:30–54; claim 1.

8 Realtek further errs when it argues that claim 1 must be read as limited to devices
 9 in which the indication signal is sent directly to the host in light of dependent claim 5, which
 10 specifically describes a device in which the indication signal preceding the interrupt signal is sent
 11 to the host interface logic located at the boundary between the adapter and the host, rather than to
 12 the host processor itself. Def. ‘459 Non-Infringement Br. at 3–4. According to Realtek, “[t]he
 13 inventors clearly understood these two methods to be different, and they claimed them as distinct
 14 inventions.” *Id.* at 3. What Realtek appears not to appreciate is that, because claim 5 depends
 15 from claim 1, it is not a “different method” or “distinct invention” but simply a particular
 16 embodiment of the same invention described in claim 1. In other words, claim 5 is subsumed in
 17 claim 1 and any infringement of claim 5 must necessarily infringe claim 1 as well.

18 It is axiomatic that an independent claim must be construed to encompass within its
 19 scope all of its dependent claims. As the leading treatise concerning claim drafting states, a
 20 dependent claim is “[a] claim which refers back to and further restricts (i.e. makes more narrow) a
 21 single preceding claim (the parent claim).” JOHN L. LANDIS, MECHANICS OF PATENT CLAIM
 22 DRAFTING 521 (1974). Indeed, the Federal Circuit has repeatedly affirmed that “[a] claim
 23 construction that excludes a preferred embodiment . . . is ‘rarely, if ever, correct.’” *Sandisk Corp.*
 24 *v. Memorex Prods., Inc.*, 415 F.3d 1278, 1285 (Fed. Cir. 2005) (quoting *Vitronics Corp. v.*
 25 *Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996)). Thus, the Federal Circuit has not
 26 hesitated to overturn claim constructions that would effectively exclude from the scope of an

27 rules or operations to given quantities” or “to be the cause of.” WEBSTER’S NINTH NEW
 28 COLLEGIATE DICTIONARY 510 (1986).

1 independent claim one or more of its dependent claims. *See, e.g., Microsoft Corp. v. Multi-Tech*
 2 *Sys., Inc.*, 357 F.3d 1340, 1353–54 (Fed. Cir. 2004) (reversing district court’s claim construction
 3 of “speakerphone” as a traditional speakerphone in claim 1 because such an interpretation
 4 excluded the embodiments of dependent claims 2 and 5, which required “respectively, a ‘deskset
 5 microphone’ and a ‘deskset speaker,’ or a ‘headset microphone’ and a ‘headset speaker’”).

6 Far from proving that claim 1 must be read to exclude what Realtek characterizes
 7 as “indirect generation” of an indication signal to the host, Realtek’s reference to dependent claim
 8 5 establishes only that claim 1 does, in fact, encompass such devices. Indeed, the patent’s
 9 specification discloses that the “threshold value represents the amount of a data frame which will
 10 be transferred into or out of buffer 9 before an early indication signal will be generated *which may*
 11 *cause host interface logic 8 to send an interrupt to host processor 5.*” Cole Decl. Ex. 7 (‘459
 12 Patent), 6: 34–38 (emphasis supplied).¹⁴ Even Realtek’s own expert concedes, albeit in the
 13 context of offering an opinion concerning indefiniteness, that he cannot find any support in the
 14 specification to suggest that the host processor must receive two distinct signals.¹⁵

15 Both the intrinsic and extrinsic evidence therefore demonstrate not only that the
 16 Court’s construction of “indication signal” was correct, but that the term “generating an indication
 17 signal to the host processor,” as used in claim 1, reads literally on the capability of the accused
 18 products. As Realtek concedes, Realtek’s products generate an EROK, or “Early Receive OK”
 19 indication signal, in response to a threshold value comparison. An “ROK interrupt signal” is
 20 subsequently sent to the host in response to the EROK indication signal. Thus, the two signals
 21 required under the Court’s construction of claim 1 are present in Realtek’s products and there can
 22 be no genuine dispute that these products literally infringe the ‘459 Patent.

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 24 ¹⁴ As Mr. Petersen explains, “[o]ne way to generate these interrupts was to use an interrupt
 25 controller, which would gather indications from other parts of the adapter and consolidate
 26 them into a concise form to be presented to the host or microprocessor, both as software
 accessible registers and as a hardware interrupt signal.” Petersen Decl. ¶ 6.

27 ¹⁵ *See* Rubin Report ¶ 89 (“In the ‘459 patent, the structure consisting of threshold logic 10
 28 and host interface logic 8 is not described as generating an indication signal to the host
 processor.”).

B. Realtek's "Means-Plus-Function" Argument Ignores the Revised Joint Claim Construction and Prehearing Statement and 3Com's Final Infringement Contentions.

In its Claim Construction Order, the Court construed the language in claim 1 reciting a "means for comparing the counter to the threshold value in the alterable storage location and generating an indication signal to the host processor responsive to a comparison of the counter and the alterable storage location" as a "means-plus-function" element subject to 35 U.S.C. § 112 ¶ 6, and held that the structure disclosed in the '459 Patent must both "compare" and "generate." *See* Dkt. No. 375 (Claim Construction Order) at 18–19. Under Section 112 ¶ 6, 3Com must therefore demonstrate that there is some structure in the Realtek Products that literally performs the function recited in the claim limitation, and that it does so using the identical or equivalent circuit structure disclosed in the patent specification as performing that function." *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1328 (Fed. Cir. 2003).

Realtek erroneously contends that 3Com "has never identified any specific structure in the accused Realtek product as identical or equivalent to the structure in the '459 patent." Def. '459 Non-Infringement Br. at 7. This is simply untrue. To the contrary, 3Com has identified, on numerous occasions, the "Early Interrupt Control Logic" described in Realtek's datasheets as the claimed means for comparing a counter to an alterable storage location and generating an EROK signal responsive thereto, and, more specifically,

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. *See, e.g.,*

Mitzenmacher Decl. Ex. 2.

Realtek further contends that "3Com has never identified the structure in the patent it contends performs the claimed function." Br. at 7. In fact, *both* parties have identified numerous examples of structure—including 10-bit comparators—disclosed in the '459 Patent specification that perform the claimed functions of comparing a counter to a threshold value and generating an output responsive thereto. *See* Dkt. No. 327 (Revised Joint Claim Construction and Prehearing Statement Pursuant to Patent Local Rule 4-3, filed March 10, 2006) (the "RJCCS") at 84–85. Realtek's own expert certainly had no difficulty in identifying one such structure, going so

1 far as to rely upon it in his expert report in connection with his indefiniteness opinion. Rubin
2 Report ¶ 89.

3 Claim 1 of the '459 Patent has been construed and both parties have identified
4 numerous structures in the specification of the '459 Patent that correspond to the claimed means.
5 After being given the opportunity to review the hardware description language code that precisely
6 describe Realtek's products, 3Com has identified the exact collection of gates, referred to as
7 , that infringes the "means for comparing . . . and generating" element of claim 1. Thus,
8 3Com has fully met its burden with respect to this means-plus-function element of this claim.

9 **III. The Court Should Deny Realtek's Motion for Summary Judgment of Non-**
10 **Infringement of the '446 Patent**

11 **A. Realtek Misconstrues Claim 26 as Requiring Use of a "Set" of Frame Segment**
12 **Descriptors**

13 Realtek's summary judgment argument misconstrues the language of claim 26 as
14 well as the Court's Claim Construction Order interpreting that claim. To begin with, Realtek
15 contends that the claim element "using said descriptor signal to generate a frame segment
16 descriptor using a segmentation circuit" requires using the descriptor to generate a *set* of multiple
17 frame segment descriptors. Def. '446 Non-Infringement Br. at 9. The language of claim 26,
18 however, speaks only of generating "a frame segment descriptor" in the singular. Realtek can
19 point to nothing in the claim language or specification that even remotely suggests that this plain
20 language should be disregarded, or provides any rational reason for the Court to read one to mean
21 two.

22 Instead, Realtek points to a description in the specification of one embodiment, in
23 which a set of frame segment descriptors is, in fact, generated. *Id.* at 2–3.¹⁶ Realtek commits a
24 fundamental error, however, by seeking to use that description to impose an additional limitation
25 in the claim itself. It is well-established that "particular embodiments appearing in a specification

26 ¹⁶ At the same time, the specification also describes another embodiment in which a single
27 frame segment descriptor is generated, after which the corresponding data is downloaded
28 and the process repeats itself. *See* '446 Patent, 10:25–67, Fig. 4. Thus, no inference can
be drawn that the inventors contemplated that the patented method could be practiced only
by using a *set* of frame segment descriptors.

will not be read into the claims when the claim language is broader than such embodiments.”
Electro Med. Sys., S.A. v. Cooper Life Scis., Inc., 34 F.3d 1048, 1054 (Fed. Cir. 1994); *see also*
Specialty Composites v. Cabot Corp., 845 F.2d 981, 987 (Fed. Cir. 1988) (noting that limitations
“should not be read from the specification into the claims”); *Phillips v. AWH Corp.*, 415 F.3d
1303, 1323 (Fed. Cir. 2005) (same). By asking the Court to read the language “a frame segment
descriptor” in claim 26 to mean “a set of frame segment descriptors” based upon the description of
a particular embodiment in the specification, Realtek is explicitly (and impermissibly) asking the
Court to narrow the scope of that claim in direct contravention of this fundamental principle.

B. Realtek’s Products Contain a “Frame Segment Descriptor” as Described in Claim 26

Realtek apparently means to contend that the
cannot be a “frame segment descriptor”
within the scope of claim 26 because it is purportedly
Def. ‘446 Non-Infringement Br. at 7.

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¹⁷ See Rubin Report ¶ 65 (“To determine where a data file is located, not only is the starting memory address is [sic] needed, but at least data file size is needed, which can be used to derive the end memory address for the data file.”).

REDACTED

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Accordingly, 3Com respectfully submits that there is no genuine issue of material fact concerning infringement of claim 26 of the '446 Patent by Realtek's Descriptor-Based Products. At the very least, 3Com has made the necessary showing that material issues of fact exist sufficient to preclude summary judgment of non-infringement.

IV. Realtek's Motion for Summary Judgment of Non-Infringement of the '884 Patent Should Be Denied

A. Realtek's Descriptor-Based Products Process Data in a Packet While that Packet is in the Buffer.

In opposing Realtek's motion, 3Com has proffered evidence sufficient to sustain a finding that that Realtek's Descriptor-Based Products meet each and every element of claim 1 of the '884 Patent. As the accompanying declaration of Dr. Mitzenmacher shows, Realtek's Descriptor-Based Products include both claimed ports, a buffer, logic to transfer packets from the buffer to the host port, a packet filter for identifying packets, and logic to read and process identified packets and produce a data value prior to the packet's transfer to the host port. Mitzenmacher Opp. Decl. ¶¶ 39–45 & Ex. 2. Indeed, Realtek has admitted that most of the elements of the claim are, in fact, present in its products. *Id.* at ¶¶ 39, 40, 42, 44. This is sufficient to preclude summary judgment in Realtek's favor.¹⁹

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Realtek also challenges the validity of claim 1 based on indefiniteness, stating that "[t]he patent specification, however, never explains what is meant by the 'data value dependent on the contents of the packet' which the second logic must be capable of generating." Def. '884 Non-Infringement Br. at 3. This is incorrect, as a review of the specification readily reveals. The term "data value" is a common one, easily understood by lay persons as well as persons of ordinary skill in the art. The '884 Patent specifically discloses two types of data value that the processing logic may produce in preferred embodiments. In each, the processing logic stores the data values in a register by setting one or more bits. *See* '884 Patent, 10:30–33 (teaching that the processing logic may "issu[e] either an [sic] discard command or an [sic] continue command via the Command register").

8 ,²⁰ Realtek's expert opines that these
9 products do not infringe.

Nothing in claim 1 or the Court’s construction of its terms, however, suggests that the buffer must be of any particular size or configuration, let alone that the entire packet must be in the buffer at the time of processing. To the contrary, the Court construed the term “buffer” in the ‘884 Patent to mean “a temporary storage device connected to the first port for received packets,” specifically rejecting the notion that the buffer must also be “of sufficient size to store a plurality of received packets.” Dkt. No. 375 (Claim Construction Order) at 25–26. This ruling alone moots the opinion of Realtek’s expert, as that opinion is based upon the contradictory premise that “[o]ne of ordinary skill would not consider the serial-to-parallel converter [in Realtek’s Descriptor-Based Products] to be the temporary storage for received packets, but would consider the RX FIFO to be the temporary storage for received packets *because it can store one or more packets.*” Rubin ‘884 Decl. ¶ 13 (emphasis supplied). Moreover, the specification of the ‘884 Patent itself teaches that the packet filter may notify the processing logic of a match “before the packet [is] completely received.” Declaration of S.H. Michael Kim in Support of Realtek’s Notice of Motion and Motion for Summary Judgment of Noninfringement U.S. Patent No. 6,570,884, dated Nov. 16, 2007 (“Kim Decl.”) Ex. A (‘884 Patent), 7:18–19.

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1 Realtek also points to the description in the specification of an embodiment in
 2 which an entire packet is resident in the buffer before the packet is processed.²¹ As noted above,
 3 however, it is improper to use the description of a particular embodiment to narrow the scope of a
 4 claim, as Realtek plainly seeks to do here. *Electro Med.*, 34 F.3d at 1054. Any inference to be
 5 drawn from that embodiment is negated by the specification's description of a different
 6 embodiment in which the packet filter is able to notify the processing logic of a match via an on-
 7 chip interrupt signal, which "could [be] issue[d] . . . to the [NIC] processor as soon as the match is
 8 detected, rather than waiting for the packet to get to the top of the FIFO." Kim Decl. Ex. A ('884
 9 Patent), 7:12–14.

10 **B. Realtek's Descriptor-Based Products Read and Process Data from Identified**
 11 **Packets and Produce a Data Value Dependent Thereon.**

12 **REDACTED**

12 Realtek contends that "
 13 cannot be the 'reading and processing' required to be carried out by the second
 14 [processing] logic" because the patent specification describes such actions as part of the filtering
 15 process. Def. '884 Non-Infringement Br. at 9. Realtek then asserts that
 16 cannot be the second [processing] logic because it performs a filtering operation." *Id.* As best we
 17 understand it, Realtek does not deny that its products perform the functions of "reading and
 18 processing." Rather, it contends that the "reading and processing" must occur in a process distinct
 19 from the "filtering" process and must be performed by logic that is not also involved in that
 20 process. There is simply no support for this in the claim, and Realtek proffers none.²²

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 22
 23 ²¹ In that embodiment, the patent teaches "when a packet is identified with a pattern match
 24 module, a flag is written in the packet as the packet passes through the receive FIFO.
 When that flagged packet reaches the top of the receive FIFO, the processor accesses the
 packet for processing." Def. '884 Non-Infringement Br. at 3 (citing '884 Patent, 6:30–37).

25 ²² Realtek cites to an embodiment in which packet types other than VLAN packet types are
 26 identified based on the identity of certain bits that are not in the VLAN header. In this
 27 embodiment, the VLAN header is removed so that a filter which has not been designed to
 28 process VLAN packets can disregard the extra bytes contained in a VLAN header that
 precede the targeted bytes in that embodiment. Mitzenmacher Opp. Decl. ¶ 14 n.1. This
 embodiment is irrelevant here.

